

AMERICAN ARCHITECTURE. NEW CUSTOM-HOUSE, NEW ORLEANS.

A CUSTOM-HOUSE is about to be built in New Orleans, and is thus described in the *Daily Delta* of that city:—"The height of the building is to be eighty-five feet—in four lofty stories. The whole exterior will be of granite or marble ashlar. Each façade is to be composed of three projecting compartments, which are the distinguishing features of the principal entrances. The pedicellate-like appearance of the lower story is strikingly marked by rusticated joints and a heavy belt-course. Thence, the side projections are faced with pilasters, and the centres enriched by massive columns, supporting a deeply relieved entablature, the cornice of which is sustained by consoles, forming panels in the frieze, which are perforated with lights to the fourth story. The plain portions of the façade on Canal, Custom-house, and New Levee-streets are to have each a large iron-door of opened work, communicating with rail-roads, which are also to be connected by means of hoistways, with rail-roads on the several stories, the whole machinery of which will be worked by steam-power, for the receipt and delivery of goods.

It will cover a space far larger than that covered by any other building in the United States, 99,000 square feet, or 32,000 square feet more than is covered by the capitol in Washington; and it is to accommodate the Post-office, collectors' offices, land offices, U. S. courts, and the many millions of cubic feet of goods to be stored therein under the present warehousing law. The estimated cost of the edifice is about \$50,000 dollars."

A view of the proposed building, which accompanies the article we have quoted, leads us to form a less favourable opinion of its merits as an architectural work than the description.

RESISTING POWER OF BRICKS, FLAT AND ON EDGE.

SIR,—Actual experiments on the crushing weights of brickwork are very valuable to the architect and engineer, and I therefore am anxious to preserve, in your valuable paper, a record of two careful inquiries on that subject made in January last.

On Thursday, the 27th January, two brick piers, each 9 inches square in the plan, and 2 feet 3 inches high, were constructed. They were built of good sound Cowley stocks, set in cement of the usual proportions, and of good quality. One pier was built with bricks laid flat, the other with bricks on edge. They were proved on the 29th (two days after), with the following results:—"The pier having the bricks laid flatwise compressed a quarter of an inch, then cracked under a weight of 25 tons, and broke to pieces with a weight of 30 tons. The second one, with the bricks on edge, did not compress, cracked with a weight of 30 tons, and broke to pieces with 35 tons."

City, April 3.

W. T.

METROPOLITAN COMMISSION OF SEWERS.

A SPECIAL general meeting of the Metropolitan Commissioners of Sewers was held on Saturday morning, Lord Ebrington, M.P., in the chair, to take into consideration what course should be adopted in consequence of the almost entire refusal of the House of Commons to grant any sum, in the Ordinance estimates for the present year, to carry on the Ordinance survey of the metropolis, already considerably advanced by the corps of Sappers and Miners, under the authority of Government, and for the sanitary purposes of the Commissioners of Sewers.

Lord Ebrington said the meeting had been called for the purpose of considering certain propositions with regard to the Ordinance survey of the metropolis; but before they entered upon the business, he called upon Mr. Hertalet, the clerk, to read the report of Mr. Audin, their consulting engineer, on the necessity that existed for the same.

Mr. Hertalet then read a voluminous report, which stated that no plan that could be relied on at present existed, causing a great waste of public money, as regarded public improvements of parishes, construction of railways, and the valuation of property, and especially at the present moment for the arrangement of practical measures for the improvement of the public health: the commencement of the preliminary work without delay would

probably save a year of the immense mortality in the metropolis from preventable sickness, for, in the absence of the skeleton plan and levels of the surface, whereby a correct and comprehensive view of the whole drainage area may be taken, it would be impossible to design with confidence and accuracy the works of improvement so loudly demanded and universally acknowledged as essential to the improvement of public health. The report showed that it would be most unwise to attempt to connect existing surveys of separate portions of the metropolis, and urged strongly the importance of proceeding with the work.

Mr. Chadwick said, that apart from the economy of health and working ability, of premature and excessive mortality, of the bereavements of children, of orphanage and premature widowhood, preventable sickness and misery, in mere pecuniary saving this work in which we are engaged is the largest economy of our day. Under any form of calculation the economy is enormous. In the metropolis it amounts to 1*l.* per head on the whole population—to 2,000,000*l.* per annum at the least—to be eventually achieved. In the whole of England and Wales, the eventual economy must amount to between 14,000,000*l.* and 15,000,000*l.* per annum. To this economy the works we have in charge to execute are the most largely contributory, and the success of these works depends on a well-considered and skilfully-executed survey, for which we have now to seek the means. For want of a nail the shoe was lost; for want of a shoe the horse was lost; from the failure of the horse the rider was lost; is an adage which feebly represents the sequence of the ruinous parsimony which withholds, or the carelessness which neglects to secure, the first means of the economy—the complete survey. There are no public proceedings more discouraging to those who would labour for systematized and economical administration, whether local or general, than the whole proceedings in Parliament in relation to a general survey. I felt it my duty to urge the importance of a general survey for the sake of more fair and equal valuations and collections of poor-rates. These representations having failed, the charge and the collections continue unequal and oppressive. Captain Dawson made representations, which were supported by myself and others, of the importance of a general survey for that purpose; but the landed gentry in the committee of the House of Commons rejected the propositions. A competent authority has estimated that the expense incurred to the land by that rejection will be upwards of 2,000,000*l.* I speak on the authority of a competent observer, when I state that had the general survey, with the proper system of levels, been carried out as was recommended before the extension of railways, upwards of fifteen millions of expense would have been saved upon the total expenditure incurred and in progress in that class of works, and a much better direction have been given to them. Then, what a scene of waste than waste have we in extended cesspools, of whole districts of sewers constructed at wrong levels, of rates from year to year misapplied in the dark for want of a general survey in the branch of administration which it is our duty to endeavour to retrieve! At one time, and in one state of the revenue and disposition of Parliament, it was in contemplation to have all the towns surveyed by the Ordnance corps from the consolidated fund. Recently, in an altered state of the revenue and disposition of Parliament, it has been proposed that each town shall pay the expense of its own survey. The survey being a means of a large pecuniary saving, those who save money by it ought undoubtedly to contribute to the expense. But where the saving is so general, the expense of achieving it may be properly, as well as most conveniently, defrayed from a common fund, apart from the risks and almost certainty of local misdirections and misapplications. We thought, from the reasons set forth in the resolutions, that the metropolis, which had contributed so long and largely to the general fund from which the expense of surveys in other parts of the country has been defrayed, is entitled to some small share of contribution in return. At that time, moreover, as expressed, there were no other means of getting the survey forward. At the present time, however, we are in a somewhat better condition as to the control of funds, and far more will certainly be lost by any delay on the question of contribution by Parliamentary grant, than the amount of any sum that might be voted. Mr. Chadwick concluded by proposing the following resolution:—

"That if Parliament shall not sanction the continuance of the survey of the metropolis out of its regular turn by the Ordnance out of the moneys voted by Parliament, this court requests the Ordnance to continue the triangulation, which they alone have the means of doing effectively, this court undertaking the repayment of the expense of the same, if necessary, the estimate not exceeding 1,000*l.*"

Mr. Broderick seconded the resolution, and said he could not see the justice or the policy of withholding the means, when much larger sums had been spent on provincial towns, to which the metropolis had paid its share.

Mr. Leslie said that an hon. member had told the House of Commons that this survey would cost 250,000*l.* He had since then seen several of the opposition members, and they had declared to him that they did not understand the vote that had been come to. He thought the Government should bring in a short bill to authorise the Commissioners of Sewers to expend 36,000*l.* out of the rates, for was a work of such magnitude to be stopped for 36,000*l.*?

Sir H. de la Beche considered that as they had a right to make a plan for their works, they had a right to levy rates for that plan. The sappers and miners had been ordered to quit, and it was only by the courtesy of the Master-General of the Ordnance that they had been retained, to wait for the decision of the court this day. They might separate the triangulation from the general survey, for which 1,000*l.* had been advanced, and it would cost something above 2,000*l.* more, and whatever might be done as to the survey, he had no doubt they would be right in coming to a decision to retain the sappers and miners for the triangulation. As a portion of their plan comprised the City of London, he thought that body would not object to the payment of 150*l.* for their portion of it. He strongly pressed upon the court the necessity of a decision with as little delay as possible to save the triangulation, already done to about one-sixth; and the block plan for Westminster had considerably advanced.

Mr. Stanley said to provide the sum of 3,000*l.* it would not exceed an increase in the rate of 1*d.* in the pound for the district benefited, and it was of the first consequence they should proceed with the survey. It was a great point that the persons were there, with their machinery all ready; and although the expense of 3,000*l.* would be incurred (less than 1*d.* in the pound), it would be spread over a length of time corresponding with the benefits received. He, therefore, thought they had strong grounds to lay their case before the House of Commons, even for the payment of the sum out of the Consolidated Fund.

Mr. Leslie said that although he considered it absolutely necessary that the work should be done, he thought they had no legal right to charge the inhabitants with the expense. He could not but think that the House of Commons had been entirely misled on this subject.

The Chairman then put the resolution, which was carried unanimously.

The following resolutions were then put *seriatim*, and agreed to unanimously:—

"That at the time when the new Commissions of Sewers were issued, the several courts were not in a position either to raise the funds or to organize the force, nor had they the rights of entry upon buildings, such as are possessed by the Board of Ordnance, and as are necessary to execute a survey adequate to the wants of the metropolis."

"That for the reasons set forth in the first report of the Metropolitan Sanitary Commissioners, such a survey is of paramount and pressing necessity."

"That the views of the Metropolitan Sanitary Commissioners, as to the important influence which the drainage works of the metropolis is likely to exercise over the drainage of the provincial towns, are corroborated by the continued inquiries from various parts of the country, as to the progress of the works under the Metropolitan Sewers Commission,—inquiries which render it probable that the plans adopted by the metropolis will be followed by provincial towns."

"That the assistance already afforded by her Majesty's Government has greatly advanced the period for the execution of the works requisite for the sanitary improvement of the metropolis, by which works a large pecuniary saving, and a corresponding saving of health and life, will be effected."

"That it appears from the evidence of the officers of the Ordnance survey (first report of the Sanitary Commissioners, p. 423, evidence of Colonel Hall and Captain Yule), that upwards of 250,000*l.* have been expended from the Consolidated Fund towards the completion of an Ordnance survey for the part of England which has already been done, whereas works of sanitary improvement are not more urgent than in the metropolis."

"That of this extra outlay beyond the proportions which would have been expended if the survey had been completed in other towns at the same cost as the survey of the southern counties, the metropolis, according to the proportion of its rental, which is upwards of ten millions, has contributed 37,000*l.*, or upwards of one-third."

"That on this ground the request was justified that the expense of the triangulation and a block survey of the metropolis should be paid for out of the Consolidated Fund; namely, for the triangulation, and for the block survey 24,250*l.*, that is, less than one-fourth the estimate of General Colby for making and engraving a plan, and survey of the metropolis, on the same scale and style as that for Dublin; a low rate of return for the contribution of the metropolis towards the surveys of other towns."

"That nevertheless, under the circumstances, including those of the disturbance of the several drainage works in the metropolis, and the necessity of consolidating the work as early as possible, the saving of time in commencing works for the advancement of drainage and other sanitary work in the metropolis was of the highest moment."

"That from all the information which has been collected on the subject, it appears that the pecuniary loss involved by the delay of works is enormous, and that one week's delay of sanitary measures involves a loss of at least a sum as that which has been requested of the Government as the equivalent to the metropolis for its contribution towards the survey of other towns."

Mr. Home, who entered late, said the discussion in the House of Commons was a very unsatisfactory one, because no one appeared to know anything on the subject beyond this, that the Board of Ordnance, having a staff, had offered to complete the survey of the metropolis at a smaller expense than was practicable in any other way. He wished to know what had been the practice with regard to other towns which had been surveyed, because he could not agree